HERBERT Clay Dessauer was born on 30 December 1921 in New Orleans, Louisiana, to Herbert Andrew Dessauer and Shirley Ross Patin Dessauer, the first of four children. His siblings are Carol P. Dessauer Duplantis, a nurse, born 12 September 1923; Don P. Dessauer, insurance executive, born 23 December 1926; Jane P. Dessauer Luecke, teacher, born 20 January 1931. His father was a jeweler, athletics coach, and a professional baseball player; and his mother was a preschool and elementary school teacher. In fact, in one of the local churches, she organized one of the first preschool classes in New Orleans. Herb, as he is affectionately known, spent his early years in the Broadmoor area of New Orleans, which is nine feet below sea level. Herb recalls the 1927 flood in New Orleans when he was six years old; his home was spared from flooding because it was built on four-foot pillars. The children watched their neighbors go by boat to get bread and milk from the second story window of the drug store. That flood was the stimulus for the national program that led to the spillway system in Louisiana.

When Herb was 10 years old, his family was forced to break up because his father could find no work during the Great Depression. This was difficult for the family because they were a close-knit group. Herb was sent to live with his maternal grandmother, his sister Carol went to live with an uncle, and his younger sister Jane and brother Don stayed with their parents at the home of his paternal grandparents. After a year of separation, his father found work as a laborer on the construction of the Huey P. Long Bridge across the Mississippi River. That was the bridge that critics said “couldn’t be built,” but it was. At this time their home had an outdoor privy and neither gas nor electricity, but the family was together again. The children never felt poverty stricken. Herb had a garden where he grew the lettuce his mother fried as a source of calories for the hungry kids. Saturday night was bath time. Water was heated over a wood stove, and all bathed in a galvanized washtub. Herb recalls an occasion when a young heavy-set guest became stuck in the tub, and he and his father had to pull her out—very embarrassing for everybody. To entertain the children, Herb’s mother packed a lunch and they rode up and down on the Canal Street ferry, which was free.

For Christmas in 1934, Herb (aged 13) received a chemistry set. A family friend who owned a commercial chemical company furthered his interest in chemistry. He quickly did all the experiments provided by the manual until they turned boring. Then he devised more exciting experiments like making gunpowder, generating hydrogen, and trying different chemicals on various things. It was at this time that on his own he discovered chemical indicators by changing the color of flowers by acid and alkali treatment. This was his first taste of the thrill of discovery, which has followed him throughout his career.

While in high school, he and a friend rode a bicycle to school five miles away until his bike was stolen. Then he walked the distance and gradually began running it. This led to his winning a 3-mile foot race sponsored by the high school and becoming the distance runner on the track team. In January 1941, he won the prestigious Jackson Day Race (in 1940 he had come in second).

Herb and his friends were fascinated with Jacque Costeau’s early development of the Aqualung. This was the stimulus for them to build a homemade diving helmet from a 5-gallon putty can, a glass visor, and a hose connection with a one-way valve and a bicycle pump as a source of air. They could move around for 45 min at the bottom of eight feet of water in Lake Pontchartrain with this contraption, and to this day, Herb wonders why no one died from acidosis in their helmet.

Herb’s parents had a great respect for education, and he was taught the use of libraries and the treasure house of information stored therein. In fact, in high school classes, he was often caught reading instead of listening to the teacher. The family thought that, because